REMARKS

Applicants have amended their claims in order to further clarify the definition of various aspects of the present invention. Specifically, applicants have cancelled claims 1, 11 and 13-15 without prejudice or disclaimer, and are adding new claims 16-27 to the application. Of these newly added claims, claims 16, 20 and 23 are independent claims, with claims 16 and 20 reciting a hollow frame member adapted to be friction stir welded, and claim 23 reciting a hollow frame member adapted to be welded.

Each of claims 16, 20 and 23 recites that the hollow frame member is arranged against another hollow frame member, with claims 16 and 20 reciting such arrangement such that the hollow frame member is subjected to a friction stir welding, while claim 23 recites that such arrangement is such that the hollow frame member is to be subjected to a welding. Claims 16, 20 and 23 recite that the hollow frame member includes a first plate, a second plate substantially in parallel to the first plate and a third plate having plural ribs and connecting the first plate and the second plate, with an outermost rib of the third plate connecting a midway portion of the first plate and an end portion of the second plate, and with an end portion of the first plate projecting beyond the end portion of the second plate. Claims 16, 20 and 23 additionally recite that the end portion of the first plate is a portion in which by inserting a rotary tool, or welding tool, from an upper portion of the second plate of the hollow frame member to the end portion of the first plate of the hollow frame member, the friction stir welding, or the welding, is carried out between the end portion of the first plate of the hollow frame member and another hollow frame member using the (rotary or welding) tool.

Claim 20 additionally recites that at a connection portion of the end portion of the second plate and the outermost rib of the third plate, a rebate shape recessed portion is provided along to the connection portion, the rebate shape recessed portion opening directed toward a plate thickness direction of the second plate, with a corner portion of the second plate to the rebate shape recessed portion being positioned at a range in a thickness of the outermost rib of the third plate, the rebate shape recessed portion being a portion in which by inserting a rotary tool from an upper portion of the second plate of the hollow frame member, the friction stir welding is carried out between the end portion of the second plate of the hollow frame member and the another hollow frame member.

In addition to new claims 16, 20 and 23, claims 17-19, 21, 22 and 24-27 are being added to the application. Claim 17, dependent on claim 16, recites that the outermost rib is substantially perpendicular to the first and second plates. Claims 18 and 19, each dependent on claim 16, respectively recites that the another hollow frame member includes first and second plates substantially in parallel and a third plate connecting the first and second plates, with an end portion of the first plate of the another hollow frame member projecting beyond an end portion of the second plate of the another hollow frame member, the first plate of the hollow frame member being adapted to be arranged against the first plate of the another hollow frame member with friction stir welding being carried out between the end portions of the first plates of the hollow frame member and the another hollow frame member; and recites that an outermost rib at each end of the third plate connects a midway portion of the first plate and an end portion of the second plate, and that an end portion of the first plate projects beyond the end portion of the second plate at each end of the hollow frame member.

Claims 21 and 22, each dependent on claim 20, respectively recites the same subject matter as expressly set forth in claim 17; and recites that the rebate shape recessed portion is a portion in which a fourth plate is provided, the fourth plate being a separate member from the hollow frame member and the fourth plate being supported between the rebate shape recessed portion of the hollow frame member and the another hollow frame member.

Claim 24, dependent on claim 23, recites that the outermost rib is substantially perpendicular to the first and second plates; and claim 25, also dependent on claim 23, recites that a rebate shape recessed portion is provided along to the end of the second plate, the opening direction of this rebate shape recessed portion being defined. Claim 26 and 27, each dependent on claim 25, respectively recites that the rebate shape recessed portion is a connection portion between the outermost rib of the third plate and the end portion of the second plate; and recites that this rebate shape recessed portion is a portion on which a fourth plate is provided, this fourth plate being a separate member from the hollow frame member and being supported between the rebate shape recessed portion of the hollow frame member and the another hollow frame member.

In connection with these newly added claims, note, for example, Figs. 9(A) - 9(D) of applicants' original disclosure, and the description in connection therewith on pages 10-12 of applicants' Specification.

It is respectfully submitted that all of claims 16-27 are directed to the elected species.

The contention by the Examiner in Item 2 on page 2 of the Office Action mailed July 28, 2005, that only original claims 1, 11 and 13-15 are directed to the elected species, and withdrawing claims 2-10 and 12 from further consideration, is

respectfully traversed. The Examiner bases this action on his finding that there is no description in the Specification, or showing in the figures, of the elected species of Figs. 9(A) – 9(D) including any raised portions. However, attention is respectfully directed to the following description at page 10, lines 5 and 6 of applicants' Specification, immediately prior to the description in connection with Figs. 9(A) – 9(D):

> The raised portions 37a, 38a can also be applied to the embodiments of Figs. 1, 3 and 5 and to subsequent embodiments. [Emphasis added.]

Clearly, there is description in the Specification of the elected species including raised portions. For this reason, it is respectfully submitted that the withdrawal by the Examiner of claims 2-10 and 12 is in error, and it is respectfully requested that these claims be considered on the merits in the present application. In this regard, note that various of claims 2-10 and 12 have been amended by the present amendments, in light of amendments to the previously considered claims.

In any event, it is respectfully submitted that the Examiner clearly errs in concluding that the subject matter of claims 2-10 and 12 are directed to a separate species. In this regard, note that claims 2-10 and 12 are dependent upon claims directed to the elected species. Clearly, claims such as claim 16 are generic to the subject matter of, for example, claim 2. Moreover, it is respectfully submitted that upon allowance of the elected claims, including claims 16 and 19, that clearly the withdrawn claims should be re-joined and allowed in the present application, such withdrawn claims including all recitations in their parent claims being considered on the merits.

In summary, and in view of all the foregoing, applicants respectfully request reconsideration and rejoinder of claims 2-10 and 12 in the above-identified application, for consideration on the merits therein.

Applicants respectfully submit that all of the claims now presented to the Examiner for consideration on the merits in the above-identified application patentably distinguish over the teachings of the references applied by the Examiner in rejecting claims in the Office Action mailed July 28, 2005, that is, the teachings of the U.S. Patents to Tal, et al., No. 5,050,362, to Harvey, No. 3,385,162 and to Moss, et al., No. DES. 338,968, under the provisions of 35 U.S.C. 102 and 35 U.S.C. 103.

It is respectfully submitted that these references as applied by the Examiner would have neither taught nor would have suggested such a hollow frame member, adapted to be friction stir welded, as in the present claims, with the hollow frame member arranged against another hollow frame member to be subjected to a friction stir welding, and including, inter alia, wherein the hollow frame member includes, in addition to the first and second plates, a third plate having plural ribs and connecting the first and second plates, an outermost rib of the third plate connecting a midway portion of the first plate and an end portion of the second plate and an end portion of the first plate projecting beyond the end portion of the second plate, and wherein the end portion of the first plate is a portion in which by inserting a rotary tool from an upper portion of the second plate to the end portion of the first plate, the friction stir welding is carried out between the end portion of the first plate and the another hollow frame member using the rotary tool. Note claim 16; see also claim 20.

Moreover, it is respectfully submitted that the applied references would have neither taught nor would have suggested such hollow frame member adapted to be friction stir welded, having features as discussed in the immediately preceding

paragraph, and additionally wherein a rebate shape recessed portion is provided at a connection portion of the end portion of the second plate and the outermost rib of the third plate, the rebate shape recessed portion being provided along to the connection portion, the rebate shape recessed portion opening directed toward a plate thickness direction of the second plate of the hollow frame member, and a corner portion from the second plate to the rebate shape recessed portion being positioned at a range in a thickness of the outermost rib of the third plate, with this rebate shape recessed portion being a portion in which by inserting a rotary tool from an upper portion of the second plate the friction stir welding is carried out between the end portion of the second plate of the hollow frame member and the another hollow frame member. See claim 20.

Furthermore, it is respectfully submitted that these references as applied by the Examiner would have neither taught nor would have suggested such a hollow frame member adapted to be welded as in the present claims, with the hollow frame member arranged against another hollow frame member to be subjected to the welding, the hollow frame member including in addition to first and second plates a third plate having plural ribs and connecting the first and second plates, an outermost rib of the third plate connecting a midway portion of the first plate and an end portion of the second plate and an end portion of the first plate projecting beyond the end portion of the second plate, the end portion of the first plate being a portion in which by inserting a welding tool from an upper portion of the second plate to the end portion of the first plate the welding is carried out between the end portion of the first plate and the another hollow frame member using the welding tool. See claim 23.

In addition, it respectfully submitted that the teachings of the applied references would have neither disclosed nor would have suggested such a hollow frame member adapted to be friction stir welded, or such hollow frame member adapted to be welded, as in the present claims, having features as discussed previously in connection with claims 16, 20 and 23, and, moreover (but not limited to), wherein the outermost rib is substantially perpendicular to the first and second plates (see claims 17, 21 and 24); and/or the structure of the another hollow frame member adapted to be welded to the recited hollow frame member, as in claim 18; and/or wherein an outermost rib at each end of the third plate connects a midway portion of the first plate and an end portion of the second plate, with an end portion of the first plate projecting beyond the end portion of the second plate at each end of the hollow frame member (see claim 19); and/or wherein the rebate shape recessed portion is a portion in which a fourth plate is provided, as in claims 22 and 27.

With use of the hollow frame member as in the present invention, welding of both the first and second plates of respective hollow frame members can be performed from one side of the members, as can be appreciated from Figs. 9(A) – 9(D) of the present disclosure. That is, according to features of the present invention, the welding (for example, friction stir welding) is carried out on abutted portions between lower (first) faceplates of the hollow frame member and another hollow frame member, by inserting, e.g., a rotary tool from the side of the upper faceplate of the hollow frame member and the side of the upper faceplate of another hollow frame member, that is, through the space which is formed between the upper (second) faceplates of the hollow frame member and another hollow frame member, to the end portions of the lower (first) faceplates of the hollow frame member and the another hollow frame member.

Accordingly, welding can be performed on the lower plates of the members being welded, without the need for turning the structures over and without the need for welding tools on opposite sides of the members being welded.

Moss, et al. discloses an ornamental design for a window component extrusion. The ornamental design is shown in the sole Figure in this design patent.

It is respectfully submitted that this reference does not disclose, nor would have suggested, such hollow frame member as in the present claims, adapted to be welded/friction stir welded as recited in the present claims, and advantages thereof; or the other features of the present invention and advantages thereof as discussed previously.

The contention by the Examiner that the hollow extrusion of Moss is "inherently capable of being welded" is respectfully traversed, particularly insofar as applicable to the present claims reciting how such hollow frame member is adapted to be welded/friction stir welded.

In addition, it is respectfully submitted that Moss, et al. would have neither taught nor would have suggested such hollow frame member, having the third plate with plural ribs connecting the first and second plates, and/or the outermost rib of the third plate, as in the present claims, and advantages thereof.

Harvey discloses a metallic load-bearing plank, which may be interlocked with other planks and placed over uneven or otherwise adverse terrain to facilitate movement of vehicles over such terrain, the structures being interlocked as shown in Fig. 3 and discussed in column 2, lines 48-59, with each member respectively being shown in Figs. 1 and 2 and described in the paragraph bridging columns 2 and 3 as well as in column 2, lines 51-59.

It is respectfully submitted that Harvey would have neither taught nor would have suggested the hollow frame member adapted to be welded/friction stir welded with the hollow frame member arranged against another hollow frame member to be subjected to the welding, and the hollow frame member including, inter alia, the third plate having plural ribs and connecting the first and second plates, with an outermost rib of the third plate connecting a midway portion of the first plate and an end portion of the second plate, or wherein an end portion of the first plate projects beyond the end portion of the second plate, as in the present claims.

The contention by the Examiner that Harvey discloses a hollow frame member having a first bottom plate 48 which projects beyond a second top plate 12a is noted. However, it is emphasized that in the claims as presently amended, the connecting of the third plate to the first and second plates is recited; and, moreover, it is recited that an end portion of the first plate projects beyond the end portion of the second plate. As to this projection, compare Fig. 9(A) according to the present invention with the structure of Harvey, including the structure represented by reference character 42 in Fig. 2 and the structure represented by reference characters 20 and 22 in Fig. 1. It is respectfully submitted that Harvey would have neither taught nor would have suggested the presently claimed subject matter, including, inter alia, the third plate.

Moreover, it is respectfully submitted that Harvey does not disclose, nor would have suggested, the hollow frame member arranged against another hollow frame member to be subjected to welding/friction stir welding, and the structure of the hollow frame member such that the welding/friction stir welding is carried out between the end portion of the first plate of the hollow frame member and the another hollow frame member; or, more specifically, between the end portions of the

first plates of the hollow and another hollow frame members, from an upper portion of the second plates, as in the present claims.

Tal, et al. discloses modular, constructional elements, the elements being described most generally in column 1, lines 35-47. Note also Figs. 1-2B, and the description in connection therewith from column 2, lines 65 through column 3, line 29, of Tal, et al.

It is respectfully submitted that Tal, et al. would have neither taught nor would have suggested the structure adapted to be friction stir welded, as in the present claims, including, inter alia, the upper and lower face plates especially as set forth, for example, in claim 19.

In addition, it is noted that in the construction panels in Tal, et al. the upper face plate extends beyond the lower face plate at one end thereof; and is respectfully submitted that this reference would have neither disclosed nor would have suggested such a hollow frame member as in the present claims, having the third plate with an outermost rib thereof connecting a midway portion of the first plate and an end portion of the second plate, an end portion of the first plate projecting beyond the end portion of the second plate as in claims, and advantages thereof in enabling welding of the hollow frame member at both upper and lower faces, from the upper side.

In view of the foregoing comments and amendments, reconsideration and allowance of all claims presently in the application are respectfully requested.

Applicants request any shortage in fees in connection with the filing of this paper, including extension of time fees, and for which no other form of payment is offered, be charged to Deposit Account No. 01-2135, or credit any overage in fees submitted herewith (Case: 503.35255VX8).

Respectfully submitted,
ANTONELLI, TERRY, STOUT & KRAUS, LLP.

By _____
William I. Solomon
Registration No. 28,565

WIS/gjb
1300 N. Seventeenth Street
Suite 1800
Arlington, Virginia 22209
Tel: 703-312-6600
Fax: 703-312-6666